

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (Original) A servomotor driving controller for drivingly controlling a servomotor, comprising:

velocity command determining means for determining and outputting a velocity command at every predetermined period based on a deviation between a position command from a host controller and a position feedback signal from a position detector; and

correction means for correcting the velocity command outputted from said velocity command determining means based on correction data for a predetermined time period.

2. (Original) A servomotor driving controller according to claim 1, wherein the correction data are predetermined using learning control.

3. (Original) A servomotor driving controller according to claim 2, wherein the correction data are determined by performing the learning control based on position deviations for predetermined periods obtained in repeatedly driving a driven member in a predetermined region by the servomotor to obtain a velocity command, and by subtracting a differentiated value of the position command from the velocity command obtained by the learning control.

4. (Original) A servomotor driving controller according to claim 2, wherein the correction data are determined by analyzing correction data obtained by the learning control.

5. (Original) A servomotor driving controller according to claim 1, further comprising detecting means for detecting reversal of the position command,

wherein the correction data are predetermined for the predetermined time period from time of reversal of the position command, and said correction means corrects the velocity

command based on the correction data for the predetermined time period from the reversal of the position command detected by said detecting means.

6. (Original) A servomotor driving controller according to claim 1, further comprising a computer for preparing the correction data connected therewith.

7. (Original) A servomotor driving controller according to claim 1, further comprising detecting means for detecting reversal of the position command,

wherein the correction data for the predetermined time period from reversal of the position command are predetermined based on an output from an inverse function of an open-loop transfer function for generating the torque command from the velocity command when a model of friction acting on a controlled object is inputted.

8. (Original) A servomotor driving controller according to claim 7, wherein the correction data are determined by filtering the output from the inverse function.

9. (Original) A servomotor driving controller according to claim 7, wherein the correction data are advanced by a delay time of the filtering to thereby compensating for the delay time.

10. (Original) A servomotor driving controller for drivingly controlling a servomotor, comprising:

torque command determining means for determining and outputting a torque command at every predetermined period based on a deviation between a velocity command and a velocity feedback signal from a velocity detector, the velocity command being obtained based on a deviation between a position command from a host controller and a position feedback signal from a position detector; and

correction means for correcting the torque command outputted from said torque command determining means based on correction data for a predetermined time period.

11. (Original) A servomotor driving controller according to claim 10, wherein the correction data are predetermined using learning control.

12. (Original) A servomotor driving controller according to claim 11, wherein the correction data are determined by performing the learning control based on position deviations for predetermined periods obtained in repeatedly driving a driven member in a predetermined region by the servomotor to obtain a torque command, and by subtracting a second-order differentiated value of the position command from the torque command obtained by the learning control.

13. (Original) A servomotor driving controller according to claim 11, wherein the correction data are determined by analyzing correction data obtained by the learning control.

14. (Original) A servomotor driving controller according to claim 10, further comprising detecting means for detecting reversal of the position command, wherein the correction data are predetermined for the predetermined time period from time of reversal of the position command, and said correction means corrects the torque command based on the correction data for the predetermined time period from the reversal of the position command detected by said detecting means.

15. (Original) A servomotor driving controller according to claim 10, further comprising a computer for preparing the correction data connected therewith.